

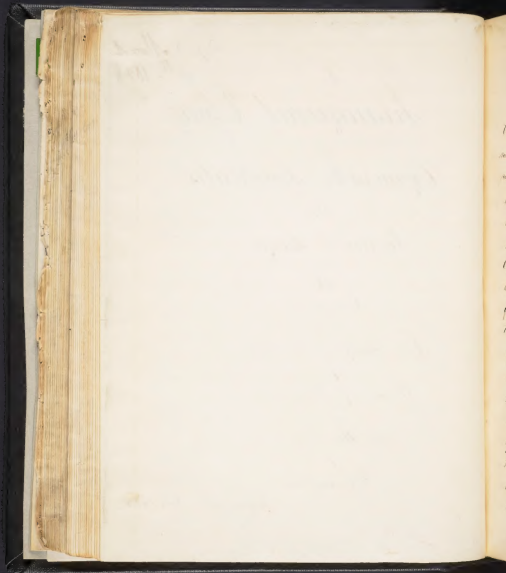
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Inaugural Essay  
on  
Larynx & Tracheitis.  
By  
James T Boyd.  
of  
Virginia.

A candidate for the degree  
of  
Doctor of Medicine  
in  
The University  
of  
Pennsylvania.

And given of our Lord 1828.



of  
Cynanche Trachealis.

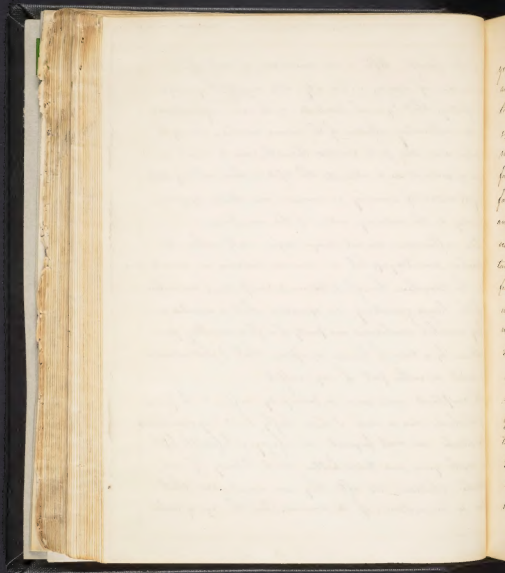
When about to engage in the consideration of this subject, I am  
met with no small difficulty in deciding, as to the most suitable  
manner of dividing it; for on the one hand, we find it distinguished  
into idiopathic and symptomatic; that is, when it is primarily and to  
a considerable extent situated in the Trachea, or when it derives itself  
as a consequence of some other disease, such as Tubercle, Scrophulous,  
Cynanche Maligna &c. for it is said to be accompanied with or  
be attendant on such diseases in some instances. Again, we  
find it divided into spasmodic, and inflammatory, and it is under  
the head of this last distinction, that Doctor Brown advances an  
opinion and says, that in perhaps no case of Croup is  
whole muscular action so much deranged, only in some instances,  
the inflammatory symptoms are more prominent than in  
others, and in allusion to the same, Doctor Chapmans  
opinion goes to prove, that in the majority of instances where  
the attack is sudden, it partakes of the nature of spasm,  
and that time is requisite to induce inflammation, which  
consist in an altered action of the vessels, effected comparatively

by a blue fringe

by a slow process. After a due consideration of such opinions and modes of reasoning, I shall only allow myself the privilege of asserting, that Symplic Treacher as its name imports, consists in an inflammatory affection of the mucous membrane lining the Treacher and other parts connected therewith, raised to such a degree of excitement as to stimulate the vessels to throw out coagulated lymph, instead of insuring an increased and altered secretion, according to the customary action of this membrane.

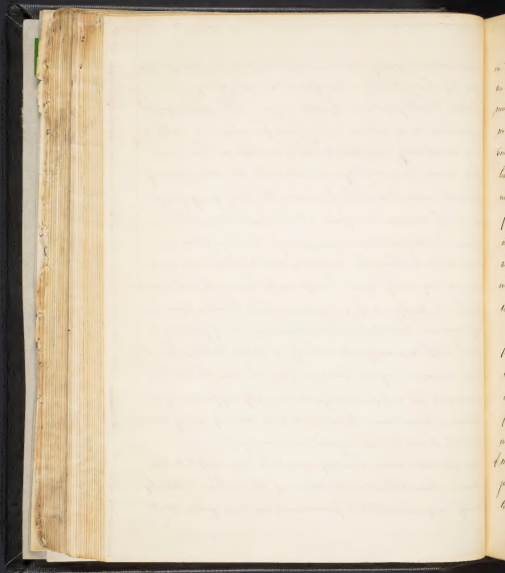
This inflammation does not always confine itself within the Treacher and Larynx, but in numerous instances is said to extend to the Bronchiae, throughout the minute ramifications, and surface of the Lungs, generating an exudation which is described as being somewhat membranous and partly of a fluid, scumlike form, attended by a train of febrile symptoms which I shall endeavour to describe in another part of my subject.

The complaint under review is principally confined to the period of childhood, and as such I shall chiefly limit my consideration. Its attacks are most frequent in infancy, or before the fifth or sixth year, and Doctor Haller thinks it rarely if ever attacks children till after they are weaned, and that there is no instance of its occurrence above the age of twelve.



years. I cannot exactly coincide with the Doctor in this opinion, and, by leave to differ thus far, in as much as my own limited knowledge, though founded upon short and imperfect experience, as is natural to supposed fancifulness, is with a very satisfactory exception to the rule, which is that I am fully aware, and perfectly intimate with two cases of a very formidable nature too, which fell under the care of my preceptor and which occurred in infants at the breast. On another occasion I witnessed it in a young man between eighteen and twenty two, who had been subject to attacks at various intervals from a very early age. Independent however of circumstances which certainly is of a conclusive kind, I should have been very cautious and reluctant, in presuming in opposition to such high and respectable authority as Doctor Haller, had I not considered myself fortified from the cases which I have mentioned, but most particularly, as I am still supported by the opinion of Doctor James who admits as I have repeatedly said, that the Doctor's rule as a general one is very good.

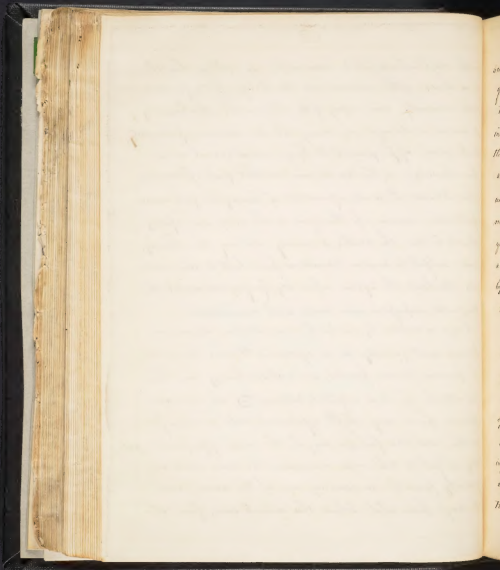
Some particular districts of country seem to be more subject to this disease than others, and as instances of this you have it stated by nearly every writer that it prevails most and to a greater extent





in the neighbourhood which border on the sea shore, where the  
soil is border with moisture, and the change of temperature  
more sensibly and readily felt. It is on the other hand by  
no means a stranger in many inland situations, particularly  
such as are appropriated to large marshes, such as we  
have bordering on the small rivers in that part of Virginia  
where I reside. It is also represented as observing in a great measure  
particular seasons of the year, as the winter and spring  
at which time the weather is usually stormy and blowing,  
and subject to sudden transitions from heat to cold, in this  
way attacking the system when ill prepared to combat the  
inequitable impressions made under such circumstances.

Croup is considered by all to be a noncontagious disease, and  
occurs most generally, as an epidemic. It seems however to  
be peculiar to some families, and a child having once had  
an attack of it, is subject to return. It is maintained  
further from any slight exposure to cold or damp  
weather, and this perhaps may be the most appropriate part  
of my subject, to take under consideration the causes which are  
generally presented as exciting one of this disorder; and  
to judge from what I have this moment said, from the



season. It is given at which it commonly exists, together with its  
general nature and character, we cannot but readily come to  
the conclusion, that, exposure to cold or damp weather, residing  
in cold water, going thinly clad, with the neck bare, and wearing  
the chief of them, and probably the only one we can introduce  
as uniformly efficacious. Though Doctor Chapman furnishes  
us with the most direct and satisfactory proofs that its occurrence  
may be traced in many instances, as proceeding from an excess  
quantity of heavy and indigestible food taken into the stomach  
shortly before going to bed, and that it is also caused  
by the presence of worms, or any other irritating matter of a  
similar nature.

Concerning the appearance attended in a putrid  
examination of them who have died from typhus, &c. &c.,  
as may be seen in the account, but upon the authority of the  
above mentioned particular attention, we find it stated that in  
examining the bodies of such, it is not unusual to find the lungs  
in a healthy state, though in short, they will be soon  
influenced as particular points in these organs are necessarily  
attending to the phrenes, in tracing the 'Benevolent' their heart.  
This minute examinations they may be found filled with



membrane which is of a firm and dense consistency and this  
embracing up the trachea and Larynx constitutes the  
membranous like coating which was mentioned in a former  
part of the subject and whose presence has been ascertained  
rather doubted by every high authority; though when in  
consideration of the name, Doctor Ducas says, no one will  
doubt the formation or existence of a membrane in case of death  
from cough, but such as are not in the habit of investigating  
the nature of diseases by dissection, and go on to state that  
he has witnessed it in more instances than one, which was  
entirely sufficient to prove that it sometimes existed.

The same may attack in one of two ways, first by insinua-  
tion, as the Chills and its most prominent features being  
at, a slight, though frequent hoarseness, attended when the  
cough begins, and which may continue for some days without  
undergoing the slightest change, until perhaps the application of  
some irritating cause, such as cold or damp weather, or when  
some stimulus is put on improper vessels to perspiration;  
then at giving birth to more formidable symptoms, as difficulty  
of breathing, aggravation of cough, without the aid of expectorations  
and frequently fever. This form of attack is generally longer



in common to all cases, that the res. I shall next mention,  
and is that it is his descent to the power of nature.  
on the second power it may attack with the most alarming  
suddenness, when no such onset was anticipated, and when  
thus sudden in its appearance, will proceed fast from the  
moment of attack, and if we do not promptly arrest its  
march, which is terribly rapid, will but too frequently triumph  
in death, when thus sudden and unexpected, the patient  
will be haunted with a peculiar whining, sonorous inspirations  
thought by some to resemble the croaking of a cock, and  
by others compared (more fitly, I think) to the baying  
of a dog, or many other similar sounds. The voice  
will likewise be almost entirely and interrupted the cough in  
this case is also hoarse and dry, there is great difficulty  
of breathing, with other febrile symptoms.

When the child happens to be old enough to describe  
his feelings, they will be found to be such, as result from  
the presence of such symptoms as I have mentioned.  
but in early infancy it discovers itself by disquietude,  
restlessness, starting out when, and occasional screaming as if  
endeavouring to vomit — Harder this form of attack





from the first the pulse is frequent, and soon becomes  
corded and tense, the patient is restless and seems much  
anxious, complains of great thirst, the face is flushed with  
heat, eyes suffused, and often a great degree of convulsions  
ensue, from which the child is aroused by sudden fits of coughing  
and a kind of suffocation, the considerable agitation for time  
seems soon to be attended with fits of exaltation, during  
which the binary, nervous inspiration is exchanged for a violent  
stagnation, in which the child makes the cowering, or baying noise  
is maintained, and provided it be of sufficient age and strength  
will rise up, and cling instantaneously to the nearest object about it,  
looking with a fierce, anxious and piteous eye, thereby expressing  
what its voice cannot utter.

When the disease is more violent the face during the  
convulsive state is somewhat pale: when otherwise it is much  
flushed, and before death assumes a blue or purple colour,  
while the lips become livid.

There is considerable variety in the duration of Croup, in some  
instances, it proves fatal in a few hours, in others not for  
a week, but most commonly in a day or two. Related to  
this, much of course will depend on the degree of inflammation



The violence of spasms, together with the strength and constitution  
of the patient, are forming a great prognosis in these  
affections, we shall experience considerably differently, though  
as a general rule, in those cases where the cough is not so  
sudden and attended with free and early expectoration, the pain  
moderate, and subsides before, we may hope for a favorable  
issue; and also when the general symptoms are so allu-  
ated at times, as to deserve a peripneumonia.

I might go on to a much greater length in noticing the  
many peculiarities of the disease in question, but deem it  
unnecessary and superfluous, and shall therefore hasten to  
the consideration of the treatment most universally recommended,  
and that which has proved most uniformly successful.

Since it appears almost a general opinion, that the  
cough commonly meets, together with a great deal of the  
most common exciting causes, there can be little doubt of compo-  
sisting in an inflammatory affection of the mucous membrane  
the trachea, and other parts immediately connected therewith, attended  
by a spasmodic contraction of the muscles, as a consequent  
thereof, admitting such to be the fact there, which we cannot  
but readily do, our treatment must be such, as calculated



1. At like indications, and in the impulsion of a  
stroke on <sup>intercostal</sup> ~~intercostal~~ must be directed to the adoption of  
such measures as best calculate to diminish the inflammation,  
and increased action which pervades throughout the mucous  
coat of the trachea, extending often to the adjacent parts,  
which may be affected in the same manner, and to  
the same effects: as to remove our intentions in this  
respect, the employment of both general and topical  
bleedings, aided by the use of emetics, purgatives,  
blisters, subcutaneous, the warm bath, &c. may be  
implicitly, and impatiently demanded.

Which of the two ways, I have already mentioned, the  
wines may make sharp liquor, the latter part of evening  
after a short but disturbed sleep, and about two or three  
revels in the morning, will be found as the usual time  
of its declaration. From this we are induced to guess  
night is the usual time of its attacks, and the moment  
the crampy veins be heated, we should lose no time  
in the use, and application of such means as attend  
at this particular juncture, and fortunately they are  
such, as may be obtained on any occasion, or in any family.



11. The next thing to be considered is the  
Medicine, or any thing else of a similar nature that may be  
most convenient. It might be of considerable advantage to carry  
the work in hand, as calculated to ward off any serious  
or aggravation to the disease. These applications must be repeated  
the first does not promise relief, or soon as the effects of the  
last shall have subsided, for it is important that the relieving  
effect be not carried to the extent of that which is not required.  
To it the means in accomplishing the one remedy it will  
be often necessary to administer the two together, in the manner  
in some of its forms, or does proportionate to the age of the  
Patient, and Circumstances of the case, and as calculated to induce  
expectations, or equal vomiting, as shall be thought necessary.

It may be useful to observe that the remedies as mentioned,  
will but too often prove unavailing, though judiciously conducted,  
and rightly pursued in; in consequence perhaps of the proper  
time in their applications being lost, or that we have not even  
the time to be advanced, and the urgency of requiring something  
to more direct and powerful treatment, and to be at this  
juncture that we are compelled to resort to the use of blood  
letting, and other means as shall be directed.





12. and, the ~~top~~ one is fast on ~~the~~ <sup>the</sup> ~~bottom~~ <sup>bottom</sup>. It is considered by all the few physicians, (which I think  
consider presently) to be the primary, and by some other opinions  
now founded on experience, is said to be the only one in which  
we can fully confide, though, as is the fate of many other remedies,  
some place little faith in its utility, and as it can hardly be  
reasonably be supposed to prove uniformly successful in putting  
a stop to the dangerous tendency of a truly formidable disease  
as Croup generally is, though in all probability be through this  
inevitable induction that it has fallen into discredit with the  
few, and as it is substituted by others, since the introduction of  
Opium, in doses proportionate to the violence of symptoms,  
and recommended as being likely to afford relief as speedily  
as any other means; though so far as I am  
entitled to an opinion, I think little general use before this time  
with other antiphlogistic treatment by far to be preferred.  
Notwithstanding its general utility however, there is some caution  
necessary to be observed in its application, which is to explain  
from its more certain conditions as by its use we might increase  
inflammation and as a consequence hasten death, and the second  
is that the dose be increased by the lowest, and not by Lewis



though in cases where the tumor cannot be removed, care  
is taken of the general perfection of the system, as in  
removal of the age & the situation of the uterus tends  
to a cure, when applied to the affected organ.

It is strenuously advised to draw blood from the jugular  
vein, this being rather inconvenient, and should always  
be done either by the patient, himself, his parents or other  
person, in such cases, first making consultation on most occasions  
to draw it from the veins and should a mitigation of  
the symptoms not result from the first bleeding, it will be  
essential to resort to it again and again, until the desired  
effect, rest is produced: now in cases where the symptoms  
are very urgent, to show that to be and exceedingly great  
effect will be found essentially required.

After copious and repeated emulsions, a little to the throat  
is thought highly beneficial, and is of infinite pain in the  
larynx. <sup>It</sup> will be admitted at this under a general consideration  
though, I have more seen a case where they contraindicated  
depend <sup>and</sup> on other means better suited to the tender infant.  
and little to the larynx & trachea.

It notes Impetigo and attention, and should give all recommendations



which have been most uniformly successful, are  
'pearls, Indian corn, and occasionally the substance of Coffee  
relative to the last I have nothing to say, and the two  
former most chiefly engage my attention, which are highly  
and deservedly extolled by the majority while the  
remainder but little engaged in their utility, so far  
however as my limited knowledge and researches relative  
to such medicinal objects justify an opinion, & an  
intention to consider them indispensably useful in every case  
where the features of the disease are alone prominent.  
Even in advanced stages, they appear to move by a mechanical  
force, the Symplicial membrane which is said to be generated  
in Croup, many of the expectorants have been used as a substitute  
& sometimes with a view to a result of some  
kind, these however do more or less good in some instances  
so when it may be thought necessary to resort to them.  
They commonly possess an emollient, and some of the  
preparations of Sassafras are used to assist the expectorating  
power, & and produce a relaxation of the Lungs, which is  
important to be attended to by diaphoretics with the very  
best, such as a few drops of the Vinum Spices.



an extension of balanced economy, the last is to be preferred,  
and the last mode of administration is, in suitable seasonality,  
very and better known, unless it inclines to narrow. It may be  
in the effects of such measure, the narrow limit is of  
the highest value and should never be lost sight of.

111. The present system, without having the long term to be at  
the present, is which we must seek to be clear, and more  
particularly of the limits to extend, which is given the more, and  
the more to this class, beyond rather than to the present, but it is  
most uniformly simplified, and if applicable, can be to be put into  
to extend to the other side, and the measure of the same is very  
positive, as I have a case wherein the limit, however, and the  
same both, had been fully and promptly given in the same  
term, in addition of which, on the day following the other  
continued to extend, with the same measure and balance  
measures, but the effects of a moderate and of course have  
been destroyed, when all the disorganizing of systems is of course  
without a return of the same.

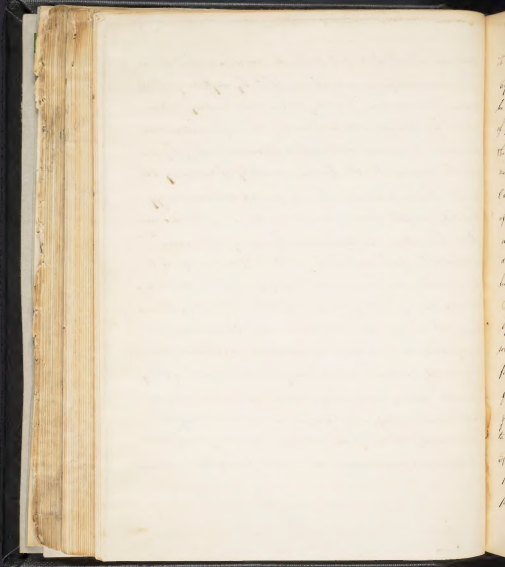
I do therefore, in addition considering the limitations of  
of money in time, that it may be to be administered





and this, I think a fit place to mention, that it is  
of infinite importance to observe, that by neglecting the  
manners advised, some for a day or two, and trusting to those  
which are trivial and insufficient. The inflammation will  
continue to spread with rapid strides, and the physician  
will be reduced to the painful necessity of witnessing the  
death of his patient, when by promptness and energy  
his life might have been preserved. For with our own  
little knowledge, substantiated by many able and  
respectable opinions, Oropus in its incipience, appears to  
be as much under the control of early and copious sweating,  
bleeds and purgatives &c. as most other inflammatory diseases.

— Thus far have I ventured on the consideration of  
Oropus, both as to its nature & peculiarities, as likewise the mode  
of treatment. I think most generally suitable, and being fully  
sensible of my incompetency to the task, must conclude  
with much modest and anxious desire, that it may be  
found worthy of the kind attention, and may merit the  
sanctions of my esteemed and learned preceptors. —



is foreign to the essence of business of life, and other  
symptoms which are indicative of approaching degeneration, that  
be most invariably succeeded in saving the disease, and the means  
of recovery adopted and practiced by him, was first to place  
the patient in a warm bath, say from 90 to 100 Fahrenheit,  
and after the usual sponges, give from one to five grains of  
Colomb as shall be found suitable to the age, strength &c  
of the child, and here until an opportunity be accomplished,  
or the breathing be relieved, when it must be gradually  
discontinued, allowing at first two, then three, four and five  
hours to intervene each day.

The means of treating Croup as pointed out, recommended  
by Doctor Hamilton, is on doubt an excellent one, and deserves  
very strict attention, but from the leading symptoms, and  
prominent features, in most of the cases I had had  
furnished with an opportunity of seeing, it appeared  
generally necessary, and in some instances, of actual demand  
to promote blood letting, followed by an emetic in order to relieve  
opium, and increase and facilitate expectoration.

By using the remedies I have pointed out, judiciously and  
promptly, we shall commonly avert the progress of Croup.

